Before the

TENNESSEE REGULATORY AUTHORITY OF 28 PM 1 20

EXECUTIVE

IN RE: RULEMAKING AMENDMENTS OF REGULATIONS FOR TELEPHONE SERVICE PROVIDERS

DOCKET NO. 00-00873

COMMENTS BY THE STATE OF TENNESSEE'S OFFICE OF THE ATTORNEY GENERAL

PAUL G. SUMMERS Tennessee Attorney General

TIMOTHY C. PHILLIPS Assistant Attorney General

SHILINA B. CHATTERJEE Assistant Attorney General

Office of the Tennessee Attorney General Consumer Advocate and Protection Division P.O. Box 20207 Nashville, Tennessee 37202 (615) 741-1671

October 26, 2001

BEFORE THE TENNESSEE REGULATORY AUTHORITY

In Re: Rulemaking Amendments of)	
Regulations for Telephone Service Providers)	Docket No. 00-00873

COMMENTS BY THE STATE OF TENNESSEE'S OFFICE OF THE ATTORNEY GENERAL

Paul G. Summers, Attorney General and Reporter for the State of Tennessee respectfully submits the following comments in response to the Tennessee Regulatory Authority's ("TRA") rulemaking proceeding regarding regulations for telephone service providers ("Service Standards"). The Attorney General submits these comments in his public interest role as protector of consumers both through his prosecution and investigatory powers under the Tennessee Consumer Protection Act and the Consumer Advocate statutes.

I. INTRODUCTION

Over the past few years, consumer complaints against telecommunication service providers have increased. As a result, the TRA opened a rulemaking proceeding to revise the regulations for telephone service providers. In order to ensure that telecommunications service providers furnish and maintain reliable and quality telecommunications services, these service standards are important and necessary. The Attorney General supports the TRA's efforts to revise the service standard rules. As the telecommunications marketplace becomes more competitive, these service standards will ensure that consumers receive quality telephone service and will foster competition in Tennessee.

The Office of the Tennessee Attorney General wishes to commend the Staff of the TRA for its initiative and its hard work toward development of the amendments to these regulations. Through the voices of multiple legal counsel and analysts during the three separate workshops,

the telecommunications industry was well represented and was able to express its concerns thoroughly about the Service Standards. The TRA Staff has made several changes at the behest of the industry. These changes are the product of protracted rule-making. Throughout a year long process, including three (3) workshops, the staff has listened to the industry and made significant revisions to the amendments to the rule proposed on September 29, 2000. No further concessions should be made to the industry.

As part of his comments, the Attorney General includes a package of 18 exhibits drawn from the Federal Communications Commission's ("FCC") Automated Management Reporting Information System ("ARMIS") data on telephone service quality. The data provides a broad national context for telephone service quality, showing not only how well the telephone industry, as an aggregate, has performed in Tennessee, but also how that aggregate performance compares to other states around the country.

In addition, for any company electing to be regulated under a price regulation plan, TENN. CODE ANN. § 65-5-209 states service quality "shall, at a minimum, be provided at the same level of quality as being provided on June 6, 1995" as directed by TENN. CODE ANN. § 65-5-208. The plain language of the statute provides that the minimum quality that should be provided is the quality that was being provided to consumers on June 6, 1995. The statute does not bar quality from increasing from the 1995 standard. Nor does the statute prevent the TRA

The Automated Reporting Management Information System (ARMIS) began in 1987 and was used for the collection of financial and operational data from the largest carriers. Several additional ARMIS reports were added in 1991 to collect service quality and network infrastructure information from the local exchange carriers that were subject to price cap regulations in 1992 for collecting the statistics that was previously included in Form M. In 1995, monitoring video dial tone investment, expense and revenue data was added. (The video dial tone reporting requirement was eliminated by the Telecommunications Act of 1996.) Today, ARMIS consists of ten public reports. *See* http://www.fcc.gov/ccb/armis/

from setting the standard of service above the "minimum" in place in 1995. Instead, the industry standard is sliding in the wrong direction. The FCC ARMIS data indicates that the quality of service that was provided in Tennessee in 2000 is below the 1995 minimum standard.

Since BellSouth has elected to be under a price regulation plan and because they serve such a large segment of Tennessee telephone subscribers, their service quality provides some indication of the current situation in Tennessee. The FCC's ARMIS data indicates a decline in service quality for Tennessee customers. This provides more substantiation that the minimum service levels established by § 65-5-208 are not being satisfied. There is a definite need for strict regulations so service quality can be improved, especially for residential customers. The following chart provides information concerning BellSouth's service performance and service quality based on the FCC's current ARMIS data:

FCC	Armis	Data	a: Bell	South	In Te	nness	ee		
BUSINESS:	1993	1994	1995	1996	1997	1998	1999	2000	Trend
State Complaints per 1,000,000 Lines for Years 1993 - 2000	72	62	61	25	36	48	68	34	Better
Percent Local Installation Commitments Met for Years 1993 - 2000	98.9	98.3	98.1	98	97.76	96.47	94.84	99.85	None
Total Trouble Reports per Month per 100 Lines for Years 1993 - 2000(Includes Initial and Repeat Trouble Reports)	1.78	1.74	1.79	1.74	1.79	1.68	1.62	1.47	Better
Average Installation Intervals in Days for Years 1994 - 2000		0	2.5	1.7	1.6	1.9	2.8	2.2	Worse
Out of Service Repair Intervals (in Hours) for Years 1994 - 2000(Includes Initial Out-of- Service and Repeat Out-of- Service Intervals)		15	18.1	11.9	10.5	14.8	10.8	9.7	Better

FCC	Armis	Data	a: Bell	South	In Te	nness	ee		
Repeat Out-of-Service Trouble Reports as a Percentage of Initial Out-of-Service Trouble Reports for Years 1994 - 2000		13.4	14.7	13.5	12.9	13.7	14.5	14.7	None
RESIDENTIAL:	1993	1994	1995	1996	1997	1998	1999	2000	Trend
State Complaints per 1,000,000 Lines for Years 1993 - 2000	145	158	97	52	57	192	278	211	Worse
Percent Local Installation Commitments Met for Years 1993 - 2000	98.8	98.5	98.8	98.9	98.66	98.5	97.61	99.96	Better
Total Trouble Reports per Month per 100 Lines for Years 1993 - 2000(Includes Initial and Repeat Trouble Reports)	3.3	3.5	3.02	3.2	3.36	3.61	3.55	3.38	Worse
Average Installation Intervals in Days for Years 1994 - 2000		0	1.9	0.6	0.8	0.8	1.3	1.3	Better
Out of Service Repair Intervals (in Hours) for Years 1994 - 2000 (Includes Initial Out-of- Service and Repeat Out-of- Service Intervals)		20.5	20	17.2	17.3	26.9	29.3	27.7	Worse
Repeat Out-of-Service Trouble Reports as a Percentage of Initial Out-of-Service Trouble Reports for Years 1994 - 2000		14.9	13.8	16.3	16.6	16.3	19	19.5	Worse

The Tennessee Attorney General points out that the rules adopted in this proceeding cannot establish service quality levels that are below those set in TENN CODE ANN. § 65-5-208 for any company regulated under a price regulation plan. Based on the information gathered by ARMIS, the statutory standard is not being met even by the two industry leaders, BellSouth and United Telephone, in the State of Tennessee. In the residential sector, the trend in service quality has been downward.

Recently, BellSouth reported 2001 third quarter earnings of \$1.7 billion, that is up from

last year's \$1.6 billion.² Revenue increased 7.7 percent thus far in 2001 to \$7.5 billion from \$6.9 billion.³ However, they have laid off several thousand employees.⁴ These two factors suggest that although BellSouth has had an increase in revenue, their recent layoff is likely to result in a further decline in service quality.

United SE Telephone Company ("United") has the second highest number of access lines following BellSouth. The FCC ARMIS data indicates that their service quality has deteriorated since 1995. Additionally, United's telephone service quality in both the business and residential sectors have gotten progressively worse. The chart below lists the FCC ARMIS data for the past several years, including the data about their service quality as reported in 1995 by United. Since 1993, United's service quality trends have worsened in all categories reported to the FCC except for trouble reports by businesses in Tennessee. United is not satisfying the minimum service levels established by § 65-5-208.

FCC A	rmis	Data:	Unite	d SE	In Te	nnes	see		
BUSINESS:	1993	1994	1995	1996	1997	1998	1999	2000	Trend
State Complaints per 1,000,000 Lines for Years 1993 - 2000	0	0	0	14	0	83	22	12	Worse
Percent Local Installation Commitments Met for Years 1993 - 2000	97.15	97.3	97.79	97.97	97.64	96.37	96.42	94.47	Worse
Total Trouble Reports per Month per 100 Lines for Years 1993 - 2000(Includes Initial and Repeat Trouble Reports)	0.97	0.94	0.87	1.05	0.52	0.94	0.55	0.62	Better

BellSouth Misses, Cuts Jobs , CNN.COM (visited October 18, 2001) http://money.cnn.com/2001/10/18/news/bellsouth/>

³ BellSouth Misses, Cuts Jobs, CNN.COM (visited October 18, 2001) http://money.cnn.com/2001/10/18/news/bellsouth/>

⁴ Jeremy Hedit, *BellSouth to Eliminate 3,000 Jobs*, The Tennessean, October 19, 2001, at 1-E.

FCC A	rmis	Data:	Unite	d SE	In Te	nnes	see		
Average Installation Intervals in Days for Years 1994 - 2000		3.5	5.6	4.7	5.1	4.4	5	6.1	Worse
Out of Service Repair Intervals (in Hours) for Years 1994 - 2000(Includes Initial Out-of-Service and Repeat Out-of-Service Intervals)		8.8	10.3	15	13	24.5	15.6	17.7	Worse
Repeat Out-of-Service Trouble Reports as a Percentage of Initial Out-of- Service Trouble Reports for Years 1994 - 2000		6.4	5.8	9.7	9.9	9.3	10.2	9.5	Worse
RESIDENTIAL:	1993	1994	1995	1996	1997	1998	1999	2000	Trend
State Complaints per 1,000,000 Lines for Years 1993 - 2000	24	0	51	28	23	224	129	229	Worse
Percent Local Installation Commitments Met for Years 1993 - 2000	99.56	99.61	99.66	99.17	99	98.05	98.73	98.12	Worse
Total Trouble Reports per Month per 100 Lines for Years 1993 - 2000(Includes Initial and Repeat Trouble Reports)	1.65	1.62	1.65	2.43	1.09	2.83	2.2	2.01	Worse
Average Installation Intervals in Days for Years 1994 - 2000		1.7	1.7	2	2.8	2.4	3	3	Worse
Out of Service Repair Intervals (in Hours) for Years 1994 - 2000(Includes Initial Out-of-Service and Repeat Out-of-Service Intervals)		9.2	11.6	18	14.4	33.8	20.8	18	Worse
Repeat Out-of-Service Trouble Reports as a Percentage of Initial Out-of- Service Trouble Reports for Years 1994 - 2000		5.8	6.2	11.3	9.8	10.7	11.7	12.3	Worse

The Attorney General wishes to thank the TRA Staff for the opportunity to be heard. The Staff has painstakingly listened to the industry's concerns addressing them one by one, line by

line. The revised version of these proposed amendments reflect the TRA Staff's efforts and contains numerous revisions offered by the industry. The Attorney General urges the TRA to proceed immediately and take the necessary action to have these services standards approved and implemented so that consumers are provided with adequate protection and better service quality.

II. COMMENTS TO THE REGULATIONS FOR TELEPHONE SERVICE PROVIDERS AS PROPOSED BY THE TENNESSEE REGULATORY AUTHORITY

1220-4-2.-01 Definitions

We agree with the definitions set forth in this section of the regulations as proposed by the TRA. There have been several definitions that have been revised based on comments by the industry. We have noted that there were several definitions that were revised in favor of the industry. Nevertheless, we believe that the definitions proposed in this section are suitable for these service standards.

1220-4-2.-02 Scope of Regulations

We recommend that additional language should be added in this section in order to clarify that consumers have additional recourse available to them if a telecommunications service provider violates these regulations and a consumer does not receive an adequate remedy. We suggest that the TRA consider the following:

Nothing in this Rule is intended to amend or supersede any provision of the Tennessee Consumer Protection Act or any other state or federal law, regulation or rule. This Rule is intended to supplement all other civil or criminal remedies or actions available at law to protect consumers.

Nothing in this Rule shall be construed to permit a carrier to violate any state or federal law, regulation or rule.

This Rule is to be liberally construed for the protection of consumers in the State of Tennessee.

1220-4-2-.03 Records and Reports

It is essential that the TRA or their authorized representative have access to records and reports for a two (2) year period for them to effectively carry out their regulatory function. There have been substantial revisions to this section based on the workshops and comments that were filed. The TRA has incorporated many of the suggestions that the industry proposed during the workshops. First, the time period for filing an out-of-service report by a telephone service provider has been increased from two (2) hours to four (4) hours. Secondly, all references that require telecommunication service providers to notify the TRA when there has been a service disruption have been removed. These changes reflect the concerns of the industry and more than fairly provide them with adequate protection since they felt that the time period was previously too short. We believe that the original provisions as written by the TRA should be adopted since FCC's ARMIS data indicates that for the period from 1994 to 2000, there has been an increase in the out-of-service repair intervals (Exhibit 5, 15 and 16).

1220-4-2-.04 Customer Refunds for Service Outages and Delayed Installation of New Local Service

We agree with the provisions in this section as prepared by the TRA. It is important that consumers receive reimbursement for service outages and delayed installations. According to the FCC's ARMIS data, the percentage of installation commitments that were not met for the years 1993-2000 have substantially increased in both residential and business installations. (See Exhibit 2, 9 and 10) Since there has been inconsistent performance by telephone service providers in satisfying installation commitments, it is crucial that the rules address this problem and that the regulations reinforce improvement by the telephone service providers. By requiring telecommunications service providers to provide refunds to customers for failure to meet their

installation commitments, it provides an incentive for them to ensure that affirmative efforts are undertaken to resolve any problems concerning delayed installations. A customer should be entitled to a refund for those periods where he is not able to use his telephone because a telephone service provider fails to install service or repair telephone service. The inconsistency in installation commitments is a clear indication that the industry has not given this matter the priority needed to correct the problem.

In addition, we recommend that the TRA clearly specify the normal installation charges that are subject to a refund. We suggest that the items that constitute normal installation be clearly and conspicuously enumerated so that telephone service providers do not arbitrarily decide at a later date the installation charges that they would be willing to refund to a customer. It is possible for a telephone service provider to separate the installation charges by category and itemize the charges and only refund portions of the installation charges in order to circumvent this provision.

Additionally, we are pleased that the TRA has included language concerning service outages that result from Acts of God or civil disturbance in this provision. We realize that the industry opposes this language and strongly favors inclusion of the language "severe weather" in this provision. If the TRA includes such an exemption for "severe weather" or "acts of nature" in the definition, it would permit telephone service providers to define those events that they deem to fall into these categories and they could decline to provide refunds for service outages in these circumstances and defeat the main purpose of the regulation.

1220-4-2-.05 Customer Security Deposits

We believe that calculation of the security deposit based on "two (2) times the average

monthly charge" for local service is too vague. It is important that how security deposits are calculated for consumers be clearly specified. Rather, we suggest that the TRA revise the language in this section as follows: "two (2) times the average monthly charge" to "two (2) times the tariffed price." This will eliminate the need for unnecessary calculations by a telephone service provider. Further, it provides a more definite amount of the security deposit that is due from a customer since it is based on the tariffed price and not at the discretion of the telephone service provider.

As we previously stated, we feel that "11 out of 12 months of satisfactory payment history" is too stringent. We recommend that the Authority revise this portion of the rules in favor of consumers. We propose that the language be amended to "nine (9) out of twelve (12) months" because consumers that have a consistent nine month payment history have demonstrated that they can pay their telephone bill in a timely manner. The security deposit should be returned to those customers that pay for nine continuous months. This provides ample payment history and indicates that the consumer will pay their telephone bill. In addition, there is an incentive on the part of the consumer to continue to pay in a timely fashion because they realize that if they fail to pay their telephone bill their telephone service will be disconnected.

1220-4-2-.06 Disconnection of Local Service

Even though we agree with many of the provisions in this section, we strongly recommend that the TRA review Section 1220-4-2-.06 (1)(b) since it is possible for telecommunications service providers to broaden and expand this definition in the future as Internet traffic on access lines continues to increase. 1220-4-2-.06(1)(b) states that the telephone service provider may disconnect if:

Customer use of equipment in such manner as to adversely affect the telecommunication service provider's ability to provide service to other customers.

This clause is vague and overbroad since the clause "adversely affect the telecommunications service provider ability to provide service to other customers" can be construed in favor of the telecommunications provider at their discretion. If a consumer decides to use the Internet for an extended period of time such as all day, several hours or even continuously for 24 hours or more, a telecommunications service provider could disconnect telephone service if the customer is utilizing too much capacity on their system. Similarly, if most customers are maintaining their Internet connections for several hours or continuously then potentially, these customers could have their telephone service disconnected because a telecommunications carrier could easily state that it "adversely affected" their network capabilities. Although we acknowledge that a telephone service provider may not arbitrarily decide to engage in this practice, we believe that it would be best to eliminate any possibility of this occurring to avoid any potential problems in the future. Also, a telecommunications provider may use this provision to limit customer use of the Internet and/or deter consumers from maintaining their Internet connections on their access lines for extended periods of time. We recommend that the provision be revised to avoid these potential problems.

Additionally, the telephone service provider may determine that the necessary bandwidth is unavailable and is a "drain" on their network. This may force them to disconnect several hundred customers. We recommend that the TRA review the proposed language to ensure that this clause is not construed overbroadly by the industry.

1220-4-2-.07 Termination of Local Service to a Reseller or Cessation of Service by a Local Telecommunications Service Provider

In an environment that is attempting to foster competition, it is important to ensure that there are adequate protections for both resellers and underlying carriers. There are many consumers in the State of Tennessee who are unable to obtain telephone service because of credit history, payment history and various other reasons. When an underlying carrier terminates the service of a reseller for nonpayment, it adversely affects consumers since it will result in a loss of telephone service for those consumers. These consumers may be unable to obtain telephone service from another provider. We strongly recommend that the TRA increase the notice period for the underlying carrier to provide a soft dialtone to the affected customer. Although it is likely that the reseller has been paid for the telephone service that was supposed to be provided to the customer, the regulations anticipated this and provide that the resellers issue refunds to affected customers. Therefore, we suggest that the period be extended and that in the event that an underlying carrier supplies a soft dialtone they send a notice concerning remittance of payment so the customer pays them for the service. This will allow those affected consumers to receive telephone service and underlying carriers will receive payment for the service they are providing.

1220-4-2-.08 Privacy of Customer Information

We agree with the provision as set forth by the TRA concerning the privacy of customer information. However, we strongly urge the TRA to reconsider the privacy policies of telephone service providers. Telephone service providers require consumers to pay a monthly fee to have their name, address and telephone number not listed in the telephone directory. We urge the TRA to evaluate this closely and to consider both the federal legislation on privacy and consider

that in order to maintain the privacy of your personal information, you have to pay a telephone service provider.

1220-4-2-.09 White Page Directories

White page directories should be provided for a customer's local calling area, as well as for any other calling area that they request. We disagree with the provision that states that a telephone service provider can charge a customer a reasonable cost for directories outside of their local calling area. When a consumer subscribes to telephone service, they are paying for telephone service that allows them to make statewide telephone calls. Therefore, it would be reasonable to expect that white page directories are provided, as needed, so that consumers can find telephone numbers that are outside of their immediate calling area. Therefore, we strongly urge the TRA to reconsider this provision and require that the incumbent local exchange carrier provide white page directories that are outside of their immediate calling area free of charge to all customers that request directories for other calling areas.

In addition, the proposed provision set forth by the TRA allows the incumbent local exchange carrier to arbitrarily decide the price of the directories. Although it specifies that it must be a "reasonable cost," this is a subjective measure. We strongly suggest that the TRA specify a price or impose a limit on the price that a telephone service provider can charge for a white page directory outside their local calling area.

Consumers must be given the opportunity to make an informed decision and be given a choice concerning their telephone service and use of directory assistance. In previous comments filed during the workshop, our office expressed our concern regarding the directory assistance charges. Therefore, we strongly urge the TRA to include in the regulations a provision that

requires telephone service providers to provide a few directory assistance calls at no charge per month. Often, consumers may not be able to access or may never have received a white page directory. Also, consumers may not be able to locate their directory, may not be able to read or simply may not be able to find a particular phone number in the directory. In previous comments, we proposed six (6) free directory assistance calls per billing period month. We suggest the following language:

(9) Telecommunications service providers publishing White Page Directories must provide Directory Assistance information in a manner which will permit consumers to make an informed cost decision: (1) to take advantage of: "No charge applies for the first six (6) calls per billing period month requesting listing information for lines located within the state of Tennessee", and (2) to make an informed cost decision as to directory assistance charges for lines located outside the state of Tennessee.

Consumers have the choice to use and pay for directory assistance but, the high cost of directory assistance deters many people from using directory assistance even when they are willing to pay for the service. We strongly urge the TRA to reconsider this issue and specify that a limited number of directory assistance calls be provided to consumers without charge per month.

Finally, the white page directories do not include any information about interLATA, intraLATA and local calls, the prices of various optional services, customer directory assistance calls, free calls and other billing information. There is no information concerning the price of calls, price of various features that consumers may subscribe to and any other information about the price of their telephone service. As a result, consumers are not aware or informed about the price of their telephone service. We suggest that since these disclosures are important the Service Standards should require that this information be provided to consumers in the white page directory.

1220-4-2-.10 Emergency Service Provisioning

These provisions will ensure that in the event of an emergency there are adequate safeguards in place so that communication equipment and services are available to the citizens of the State of Tennessee. The establishment of these emergency measures provides protection and ensures that individuals are able to obtain information in the event of an emergency.

In the event that no electrical power is available, the emergency power generators will guarantee that telephone service will be available for emergency service personnel and any other providers of essential services. Further, by establishing these minimum requirements for emergency power generation it will guarantee that telecommunication services will be available throughout the State of Tennessee. The logistical or economic burden for some telecommunications providers to establish and implement these measures is outweighed by the long-term benefit of having emergency service methods in effect. Those telephone service providers that already have implemented emergency measures will already have satisfied the requirements of these service regulations and those that do not have emergency measures in effect will have over six months to implement these procedures. Therefore, we support this provision of the regulation because in the event of an emergency, telephone service is critical to the citizens of Tennessee.

1220-4-2-.11 Telephone Construction

We support the proposed regulations by the TRA concerning telephone construction by telecommunications service providers. The Underground Utility Damage Prevention Act provides adequate protection to prevent hazardous and/or disruptive damage to utilities. The Act governs and requires the notice by the party intending to excavate or demolish and provides

various other guidelines concerning excavation and safety. By incorporating a requirement that telephone service providers comply with state and federal law, we believe that this provision satisfies any concerns that may arise as a result of construction by telephone service providers.

1220-4-2-.12 Customer Complaints

This proposed provision was discussed during our first workshop with the industry on January 16, 2001. At that time, the industry did not have any opposition to this provision of the regulations. Telecommunications service providers have an obligation to their customers to insure that telephone services are reliable. The TRA's current proposed regulation 1220-4-2-.12(2) allows for additional time for a telephone service provider to respond to a consumer complaint. It allows for ten (10) working days for the telephone service provider to respond to the consumer complaint forwarded to them by the Authority. FCC ARMIS data indicates that during the period 1993 through 1995, consumer complaints per 1,000,000 lines decreased, however, it dramatically increased between 1996 until 2000. (Exhibit 1, 7 and 8) There was a downward trend in complaints for awhile and then a reversal that resulted in an increase in complaints. Relaxing the standards would be counterproductive to the current trend and it would not serve to improve in the quality of service.

1220-4-2-.13 Accuracy Requirements

We support the regulation as proposed by the TRA. It is essential that all meters and recording devices work accurately and properly and that all documentation is properly maintained by the telecommunications service provider.

1220-4-2-.14 Payment for Services

The TRA originally proposed that consumers be given a period of time to pay their

telephone bill in several installments. However, these proposed rules has eliminated this provision and consumers no longer have the availability of such a payment plan. Eliminating the installment option will severely impact consumers that are unable to meet their financial commitments. We do not expect that in each and every instance a consumer be allowed to make payment arrangements but, rather, in those extenuating circumstances consumers should be given an opportunity to choose a payment plan when they experience economic hardship. In most instances, these consumers probably have deposit monies with the telephone service provider and this should provide the telephone service provider with additional assurances that if the terms of the payment are not met, they can use the deposit monies toward payment of the outstanding amounts. We request that the TRA reconsider this provision and take into consideration that if this clause is not included, it could be particularly detrimental to individuals in the State of Tennessee that may encounter financial hardships and would need the option of a payment plan to pay their telephone bill.

Second, a fifteen (15) day period is not a sufficient period of time to pay a telephone bill. We recommend that, at a minimum, the TRA allow 20 days for a consumer to pay their telephone bill. Originally, the TRA proposed 20 days and now, has reduced it to 15 days from the date of the bill. After preparation, mailing and receipt of the bill, at least three to five days may pass and it would leave a consumer approximately one week to make their payment to the telephone service provider before their payment would be considered delinquent. This will cause hardship on consumers and increases the potential for further fees and charges to be assessed against these consumers. Such a short window of time to pay will pose problems for consumers who are not paid weekly and may not have funds on hand to pay their telephone bill upon receipt

or shortly thereafter. This requirement is too stringent and we strongly urge the TRA to reconsider this provision under the circumstances.

1220-4-2-.15 Adequacy of Service

We agree with this provision as proposed by the TRA. Adequate service is essential in the telecommunications industry and it is important that all ETC's ensure that adequate service is provided to their customers. The TRA has been given statutory authority to establish standards for a public utility and to prescribe reasonable regulations. T.C.A. § 65-4-117. Furthermore, the legislature granted the Authority express power to require every public utility to furnish safe, adequate and proper service and to keep and maintain its property and equipment in a condition that would enable it to make sure that it can provide such service. T.C.A. § 65-4-114.

The Authority has the power to effectively govern and control the public utilities placed under its jurisdiction and any doubt as to whether these service standards exceed the minimum shall be resolved in favor of the existence of the power that has been confirmed by the General Assembly upon the TRA. *Consumer Advocate v. Greer*, 967 S.W. 2d 759, 761-62 (1998).

Therefore, these service standards are just and proper and we support the establishment of these provisions to establish and maintain adequate service by telecommunications service providers. These regulations will serve to ensure adequate, quality and efficient telecommunications services are provided to the citizens of Tennessee.

1220-4-2-.16 Service Obligations for Eligible Telecommunications Carriers

Although we are pleased that the TRA has rejected the industry's proposal to require access lines that can carry only data speeds at 9.6 kilobits per second, we still feel that the original proposal by the TRA of 28.8 kilobits per second is feasible and this minimum data speed

should be available to consumers. We suggest that the TRA increase their data speed from 14.4 to 28.8 kilobits per second. According to several sources, Internet service should be provided at speeds of either 28.8 or 56 kilobits per second on telephone lines.⁵ Further, standard copper telephone lines can carry up to 64 kilobits of information a second.⁶ For those that are not able to provide this data speed, they would be permitted to file the necessary documents and proper substantiation to obtain a waiver from the TRA, as provided for in these regulations. As computer hardware and software becomes more sophisticated, it would be more prudent to have this minimum speed standard for data established at this level. Otherwise, many telecommunications providers will be able to persuade consumers that their telephone lines do not have the capacity to handle advanced technology and consumers would be misled and believe that high speed transmission lines (DSL, etc.) are necessary when their ordinary telephone access lines are capable of handling the higher data speed. If consumers think their telephone lines cannot handle higher data speeds, they may purchase additional services that they do not need. A standard telephone line can handle most of the functions of the average Internet user.

In addition, if consumers are required to affirmatively request a higher data speed, it provides telephone carriers with some assurance that not everyone will request the higher data speeds and it will not burden their system capabilities. We urge the TRA to review this provision and amend this section.

Third, we do not agree with the provision that requires calls to be completed ninety-eight

⁵ See FCC Orders Line Sharing for High Speed Internet Access, Tech Law Journal (visited October 12, 2001) http://www.techlawjournal.com/broadband/19991119.htm.>

See Ted Appel, Dialed into Local Access, The Press Democrat (visited October 12, 2001) < http:///www.pressdemocrat.com/outlook97/telcom/access.html.>

percent (98%) of the time during the five (5) highest peak hours on a statewide level. The provision mentioning that calls during the five (5) highest peak-traffic hours within the calendar quarter fails to account for the fact that Tennessee is in two time zones. The language should be revised from "measured on a statewide level" to "measured by exchange." We recommend that the TRA reconsider this clause so that there is consistent measurement across the state. In the event that the TRA rejects our proposal to measure this by exchange, we recommend that the TRA consider that Tennessee is on two time zones and this may affect the calculations of the five (5) highest peak traffic hours.

Finally, FCC ARMIS data indicates that average installation time from 1994 through 2000 has seriously declined both for residential and business customers and with regard to the industry's performance throughout the United States (Exhibit 4, 13 and 14). In 1994, the average installation period for residential customers was .1 day. In 2000, the average installation time was 1.6 days. By requiring an average installation time of three (3) days, the proposed rules allow ample time for installation, especially in view of the ARMIS data. By allowing a margin of 95% of the commitments that have to be met provides telephone service providers the opportunity to account for those instances when they are unable to meet their installation dates and gives them some flexibility.

1220-4-2-.17 Quality of Service Mechanisms

We strongly support the quality of service mechanisms that have been established in these proposed amended regulations. Penalties should be clear, meaningful and progressive. These types of penalties provide an incentive for companies to make sure quality service is consistently and continuously being provided. We agree with the proposed rules in this section. It is essential

that an Eligible Telecommunications Carrier or Company ("ETC") satisfy the service requirements for a consecutive period of time. As an accommodation to the industry, the TRA has proposed three (3) consecutive months within the particular exchange as the proper period. However, we believe that a longer period would be more appropriate. Previously, the TRA proposed a four (4) month period and we recommend that this longer time period be used since once the Quality Service Mechanisms are triggered, there is an indication that the telephone service provider's service is poor and needs to be addressed.

1220-4-2-.18 Lifeline and Link-up

We agree with the eligibility requirements that were proposed by the TRA. We believe that it is necessary to have a broad definition concerning qualification for the program. In addition, both Kentucky and Florida also have similar broad provisions concerning Lifeline and Link-up.

We disagree with the time period specified for under Section (4) of this section that specifies the notification procedures for discontinuance of Lifeline. Previously, the proposed rules stated that a time period of sixty (60) days was required when a customer no longer satisfied the criteria for receiving Lifeline. The TRA has amended this section to a reduction of time to thirty (30) day notice period by the local telecommunications service provider. This period of time is not sufficient for the customer to appeal the matter to the TRA in the event they dispute the disqualification. Furthermore, it does not allow consumers an opportunity to make alternate arrangements. Most individuals on Lifeline assistance are at lower income levels and do not have the disposable income to quickly make alternative arrangements for their telephone service and pay a required deposit. As a result, they will be without telephone service because

of the short notice period of thirty (30) days.

1220-4-2-.19 Number Conservation

Since numbering schemes for area codes and central office codes have been fully utilized, it is imperative that there are some regulations that are established concerning number conservation. The increase in long-distance calling has resulted in more routing problems and has increased telephone service congestion. Therefore, in order to resolve this problem, it is necessary to expand the number of area codes. It is necessary to conserve telephone number resources and we support the regulations proposed by the TRA concerning telephone number conservation.

1220-4-2-.21 Severability Provisions

We agree with the language concerning severability of the regulations and support them as proposed by the TRA.

III. EXCLUSION OF PREPAID CALLING CARDS FROM THE REGULATIONS FOR TELECOMMUNICATIONS SERVICE PROVIDERS

The current proposed rules have removed any reference to prepaid calling cards. The original rules proposed by the TRA that included prepaid calling cards were removed from the rules. It is imperative that regulations are established concerning prepaid calling cards in the State of Tennessee. There are consumer disclosure issues that should be clearly addressed and standards that are necessary for the prepaid calling card industry. There are numerous problems with prepaid calling cards such as inadequate disclosures, value received on the cards and truth-in-advertising. Florida realized the importance of having regulations for prepaid calling cards and established regulations for the prepaid calling card industry. In addition, California and Washington have also addressed prepaid calling cards.

V. CONCLUSION

Again, the Office of the Tennessee Attorney General wishes to commend the TRA for its initiative and its hard work toward development of the amendments to these regulations. We wish to thank the TRA for the opportunity to file comments and be heard as well. The Staff has obviously listened to the industry's concerns addressing them one by one, line by line. The proposed amended regulations contain numerous revisions that were offered by the industry.

The Tennessee Attorney General's Office supports the Tennessee Regulatory Authority's efforts to enact meaningful rules, consistent with these recommendations, to protect consumers and ensure that they receive an adequate level of service. If adopted, the Tennessee Regulatory Authority's proposals, together with these additional suggestions by the Attorney General will provide safeguards and will establish a sound basis for service standards for consumers in the State of Tennessee.

RESPECTFULLY SUBMITTED,

PAUL G. SUMMERS, B.P.R. No. 6285

Tennessee Attorney General

TIMOTHY C. PHILLIPS, B.P.R. No. 12751

Assistant Attorney General

SHILINA B. CHATTERJEE, B.P.B. No. 20689

Assistant Attorney General

Office of the Tennessee Attorney General Consumer Advocate and Protection Division

P.O. Box 20207

Nashville, Tennessee 37202

October 26, 2001

Residential: State Complaints per 1,000,000 Lines for Years 1993 - 2000

1993		1994		1995		1996		1997		1998		1999		2000	
MAX	833	MAX	1362	MAX	1733	MAX	1394	MAX	959	MAX	1142	MAX	2086	MAX	1220
Min	7	Min	80	Min	က	Min	12	Min	0	Min	F	Min	21	Min	38
Average	167.9	Average	243.3	Average	336.9	⋖	284.0	•	213.8	Average	283.3	_	414.7		399.2
Median	103	Median	117.5	Median	133	Median	155.5	Median	126	Median	211	Median	299.5	Median	348
Mode	40	Mode	3	Mode	38		20	Mode	89	Mode	64		495		28
TN Rank	31	TN Rank	27	TN Rank	20	TN Rank	9	TN Rank	80	TN Rank	23	TN Rank	21	TN Rank	17
TN Value	133	TN Value	143	TN Value	93	TN Value	50	TN Value	57	TN Value	191	TN Value	259	TN Value	209

Business: State Complaints per 1,000,000 Lines for Years 1993 - 2000

1993	1994		1995		1996		1997		1998		1999		2000	
MAX 40	9 MAX	639	MAX	1205	MAX	784	MAX	571	MAX	609	MAX	749	MAX	371
Min	0 Min	0	Min	0	Min	0	Min	ო	Min	∞	Min	0	Min	15
Average 87.4	4 Average	143.0	Average	208.9	Average	145.7	Average	111.3	Average	119.4	•	149.2	•	129.2
Median 5	0 Median	55.5	Median	22	Median	56.5	Median	56.5	Median	56.5	Median	85.5		98.5
Mode	5 Mode	7	Mode	30	Mode	5	Mode	52	Mode	42		24		99
TN Rank 2	29 TN Rank	26	TN Rank	25	TN Rank	-	TN Rank	9	TN Rank	24	TN Rank	85	TN Rank	ō
TN Value	65 TN Value	59	TN Value	55	TN Value	24	24 TN Value	33	TN Value	52	TN Value	61	61 TN Value	31

FCC ARMIS Data On Telephone Service Quality: TRA Docket 00-00873 : Telephone Service Standards

TN Telephone Service Quality
CAPD Display of FCC Armis Data
Page 2 of 6

Residential: Percent Local Installation Commitments Met for Years 1993 - 2000

	0.00	95.7	98.8	98.9	38.7	46	99.51
9	Γ	٠,	<i>J,</i>	J,	J ,		ŏ.
2000	MAX	Min	erage	Median	Mode	rN Rank	/alue
	١		•				97.71 TN Value
	3.66	96.4	98.2	98.4	98.2	12	97.71
1999	MAX	Min	age	Median	ode	ank	lue
	_		~			TN Rank	TN Value
	99.7	95.0	98.5	98.6	98.6	16	98.36
1998	MAX	Min	ge	an	de	¥	ne
	M	~	Avera	Median	Š	TN Rank	98.67 TN Value
	6.66	6.96	98.7	98.7	98.7	24	98.67
1997	×	ᆵ	9	⊑	<u>e</u>	¥	<u>e</u>
	MAX	Ē	Averag	Median	Moc	TN Rank	TN Value
	6.66	97.0	98.7	98.8	98.1	32	. 26.86
1996	×	_	0	c	Φ	×	
	MAX	Ξ	Averag	Median	Mod	TN Rank	'N Valu
	0.00	95.5	98.4	98.4	86	89	98.85 TN Value
1995			en.	_	•	J	
1	MA	Ē	Average	Median	Mode	TN Rank	N Value
	100	94.1	98.4	98.5	9.96	26 T	98.57 TN Value
1994		٠,					
19	MAX	Ē	verage	Median	Mode	TN Rank	98.86 TN Value
	8	6.3			9.7.6	29 TA	86 TN
ည		ð	Ø	Ø	6		98.
1993	MAX	Z.	verage	ledian	Mode	rN Rank	N Value
			A	≥		Z Z	N L

Business: Percent Local Installation Commitments Met for Years 1993 - 2000

1993		1994		1995		1996		1997		1998		1999		2000	
MAX	100.0	MAX	100.0	MAX	100.0	MAX	99.4	MAX	99.2	MAX	99.1	MAX	66	MAX	6.66
Min	93.4	Min	91.5	Min	91.5	Min	92.0	Min	93.8	Min	90.4	Min	84.1	Min	93.7
Average	97.6	⋖	97.2	Average	96.5	4	96.8	1	97.0	Average	8.96	4	95.9	•	97.5
Median	98.2	Median	97.9	Median	97.2	Median	97.2	Median	97.3	Median	97.1	Median	97.0	Median	97.6
Mode	96.2	Mode		Mode	98.1		97.3		97.3	Mode	96.5		96.9		97.6
TN Rank	86	TN Rank	59	TN Rank	34	TN Rank	37	TN Rank	36	TN Rank	12	TN Rank	10	TN Rank	43
TN Value	98.73	98.73 TN Value	98.22	98.22 TN Value	98.08	TN Value	98	TN Value	97.76	97.76 TN Value	96.43	TN Value	95.03	TN Value	98.52

FCC ARMIS Data On Telephone Service Quality: TRA Docket 00-00873 : Telephone Service Standards

TN Telephone Service Quality_____CAPD Display of FCC Armis Data Page 3 of 6_____

Residential: Total Trouble Reports per Month per 100 Lines for Years 1993 - 2000 (Includes Initial and Repeat Trouble Reports)

2000			2.3		<u>.</u>	47	3.27
×	MAX	Min	4 Average			TN Rank	TN Value
1999	4.(-	4.2			47	3.35
19	MAX	Min	Average	Median	Mode	TN Rank	TN Value
86	4.2	1.1		2.4	2.0	48	3.44
1998	MAX	Min	Average		Mode	TN Rank	TN Value
.	3.6	1.2	2.3	2.3	2.1	47	3.06
1997	MAX	Min	Average	Median	Mode	TN Rank	3.13 TN Value
Q	3.4	4.1	2.5	2.5		46	3.13
1996	MAX	Min	Average	Median	Mode	TN Rank	TN Value
ž	4.5	4.1	2.4	2.4	1.8	40	2.89
1995	MAX	Min	Average	Median	Mode	TN Rank	TN Value
4	4.6	0.0	2.4	2.4	1.6	44	3 32
1994	MAX	Min	_	Median	Mode	TN Rank	3 15 TN Value
က	4.8	-	2.6	2.5	2.7	38	, 1,
1993	MAX	Min	Average	Median	Mode	TN Rank	TN Value

Business: Total Trouble Reports per Month per 100 Lines for Years 1993 - 2000 (Includes Initial and Repeat Trouble Reports)

1993	1994		1995		1996		1997		1998		1999		2000	
	2.8l MAX	2.7	MAX	2.5	MAX 2.	2.0	MAX 1	ω.	MAX	8.	MAX	1.7	MAX	1.9
Min	.2 Min	0	Min	0.8	Min 0.	5.	Min	4.	Min	0.3	Min	4 .0	Min	0.4
Average	1.6 Average	1.5	Average	10	•	<u>ক</u>	1verage 1	ς,	Average	αį	_	-	Average	0
•	1.6 Median	1.4	Median	4	•	რ.		ςi	Median	Ċ	Median	0.	Median	6.0 0
	1.2 Mode	1.7	Mode	0.	Mode 1	0	Mode 0	6.0	Mode	-	_	0	Mode	Θ Θ
TN Rank	32 TN Rank	36	TN Rank	38	TN Rank 4	44 T	TN Rank	45	TN Rank	43	TN Rank	4	TN Rank	43
TN Value	TN Value	1.66	.66 TN Value	1.7	TN Value 1.6	.68 T	TN Value 1.6	.63.	TN Value 1.	58	TN Value 1.4	46	TN Value	1.38

TRA Docket 00-00873: Telephone Service Standards FCC ARMIS Data On Telephone Service Quality:

TN Telephone Service Quality
CAPD Display of FCC Armis Data
Page 4 of 6

Residential: Average Installation Intervals in Days for Years 1994 - 2000

1994	1995		1996		1997		1998		1999		2000	
MAX 11	WAX	13.2	MAX	5.8	MAX	5.3	MAX	5.4	MAX	3.6	MAX	3.9
Min	Min	0.3	Min	0.2	Min	0.2	Min	0.3	Min	0.4	Min	4.0
Average 2	2.3 Average	2.8	Average	15.	Average	1.5	Average	1.6	Average	1.5	Average	4.
•	.7 Median	2.1	Median	0.	Median	ر ن	Median	1.5	Median	رن تئ	Median	ا .3
Mode 1	9 Mode	2.4	Mode	6.0	Mode	6.0	Mode	-	Mode	- -	Mode	_
TN Rank	4 TN Rank	22	TN Rank	15	TN Rank	19	TN Rank	12	TN Rank	29	TN Rank	37
TN Value	0.1 TN Value	1.9	1.9 TN Value	0.7	0.7 TN Value	0.9	0.9 TN Value	0.9	0.9 TN Value	1.5	1.5 TN Value	1.6

Business: Average Installation Intervals in Days for Years 1994 - 2000

1994		1995		1996		1997	1998		1999		2000	
MAX	14.1	MAX 13	13.1		9.2	MAX 7.8	MAX	10.2	MAX	6.9	MAX	6.8
Min	0	Min	γ	Min 0.	9	Min 0.4	Zin	9.0	Min	0.9	Min	9.0
Average	3.5	Average 4	4.4		3.0	Average 2.6	Average	2.9	Average	2.9	Average	2.6
Median	2.7		3.6	a		Median 2.5		2.7	Median	2.8	Median	2.6
Mode	0		2.1	Mode 1.	6.	Mode 2.3		2.1	Mode	2.4	Mode	2.1
TN Rank	7	TN Rank	8	TN Rank		TN Rank 15	TN Rank	<u>6</u>	TN Rank	32	TN Rank	33
TN Value	0.3	0.3 TN Value	2.7	2.7 TN Value 1.	T 6:	1.9 TN Value 1.7	1.7 TN Value	2.1	2.1 TN Value	3.1	TN Value	2.8

FCC ARMIS Data On Telephone Service Quality: TRA Docket 00-00873 : Telephone Service Standards

TN Telephone Service Quality
CAPD Display of FCC Armis Data
Page 5 of 6

Residential: Out of Service Repair Intervals (in Hours) for Years 1994 - 2000 (Includes Initial Out-of-Service and Repeat Out-of-Service Intervals)

1	8	i i	966		26			1999		2000	
MAX		48.6	MAX 37.6	MAX	× 43	MAX	45.7	MAX	39.3	MAX	72.9
Min		10.5	Min 10.8		Min 11	Min	12.2	Min	11.9	Min	12.4
Average			•	2 Average	•	Average	22.5	Average	22.3	Average	23.4
Median		24.8	· ·	2		Σ	21.7	Σ	21.3	Σ	20.1
Mode	<u>ה</u>	4.	Mode 15.6	Mode	le 14.2	Mode	15.8	Mode	19.9	Mode	12.4
21 TN Rank	•	4	14 TN Rank	9 TN Rank	15 15	TN Rank	43	TN Rank	45	TN Rank	39
20.1 TN Value	19.	9.4	19.4 TN Value 17.3	17.3 TN Value		17.2 TN Value	27.6	27.6 TN Value	28.6	28.6 TN Value	26.5

Business: Out of Service Repair Intervals (in Hours) for Years 1994 - 2000 (Includes Initial Out-of-Service and Repeat Out-of-Service Intervals)

1994		1995		1996		1997		1998		1999		2000	
MAX	38.6	MAX	50.6	MAX	42.4	MAX	23.7	MAX	34	MAX	32.9	MAX	45.9
Min	5	Min	5.3	Min	5.1	Min	7.7	Min	9.9	Min	7.8	Z	8.7
Average	18.3	Average 1	19.8	Average	17.4	Average	15.1	Average	16.6	Average	17.2	Average	17.8
Median	17.2	Median	18.3	Median	16.6	Median	14.8	Median	16.1	Median	15.9		16
Mode	12.9	Mode 1	13.7	Mode	16.6	Mode	9.6	Mode	12.3	Mode	11.1	Mode	9 2
TN Rank	21	21 TN Rank	23	TN Rank	ω.	TN Rank	0	TN Rank	52	TN Rank	7	TN Rank	Ŋ
TN Value	14.8	14.8 TN Value	17.7	17.7 TN Value	12.3	12.3 TN Value	10.6	10.6 TN Value	15.7	15.7 TN Value	11.1	11.1 TN Value	10.2

FCC ARMIS Data On Telephone Service Quality: TRA Docket 00-00873 : Telephone Service Standards

TN Telephone Service Quality
CAPD Display of FCC Armis Data
Page 6 of 6

Residential: Repeat Out-of-Service Trouble Reports as a Percentage of Initial Out-of-Service Trouble Reports for Years 1994 - 2000

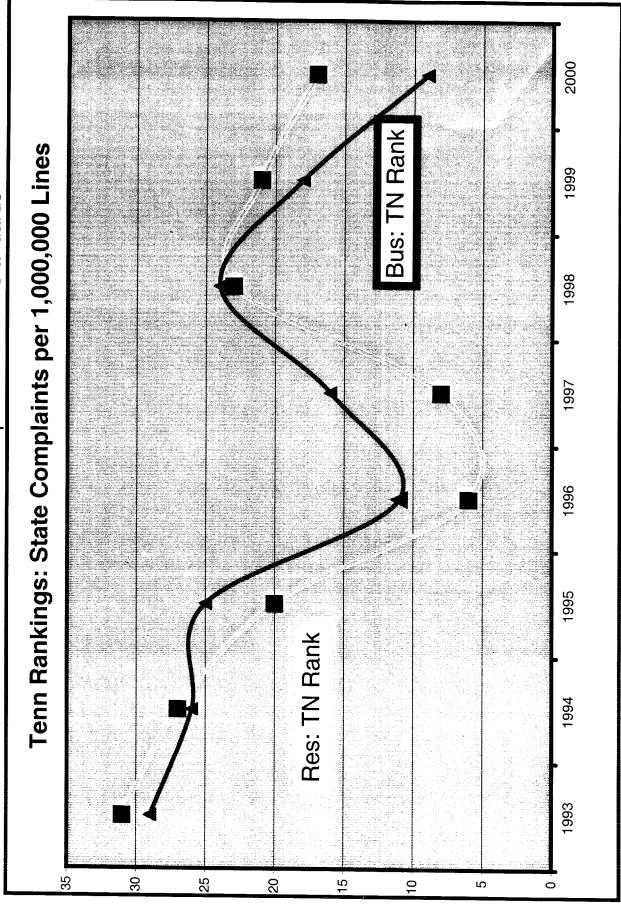
1994		1995		1996		1997		1998		1999		2000	
MAX	56.1	MAX 39	39.7	MAX	60.5	MAX	34.3	MAX	36.3	MAX	38.9	MAX	36.8
Min	6.3	Min	Ξ	Min	11.4	Min	11.3	Min	9.2	Min	8.5	Min	9.5
Average	18.5	Average	19.0	Average	21.5	Average	19.4	Average	19.0	Average	19.9	Average	20.5
Median	16.8	Median	6.7	Median	17.6	Median	16.7	•	15.9	Median	17.5	Median	19
Mode	12.2	Mode	12	Mode	4	Mode	15.3	Mode	12.9	Mode	14.8	Mode	13.4
TN Rank	16	16 TN Rank	15	TN Rank	24	TN Rank	25	TN Rank	26	TN Rank	31	TN Rank	25
TN Value	14.5	14.5 TN Value 13.	3.2	13.2 TN Value	15.6	15.6 TN Value	16.3	TN Value	16.1	TN Value	18.8	TN Value	18.7

Business: Repeat Out-of-Service Trouble Reports as a Percentage of Initial Out-of-Service Trouble Reports for Years 1994 - 2000

1994		1995		1996		1997		1998		1999		2000	
MAX	33.2	MAX	28.6	MAX	37.9	MAX	35.8	MAX	39.9	MAX	40.9	MAX	37.6
Min	8.5	Min	9.5	Min	10	Min	9.1	Min	10.5	Min	10	Min	10.2
Average	17.3	Average	18.1	Average	19.9	Average	18.6	Average	18.8	Average	19.3	Average	19.4
Median	16.4	Median	17.5	Median	17.4	Median	14.8		14.8	Median	15.4	Median	18.3
Mode	15.6	Mode	14.6	Mode	12.7	Mode	11.6	Mode	15.8	Mode	13.1	Mode	12.7
TN Rank	თ	TN Rank	4	TN Rank	4	TN Rank	16	TN Rank	19	TN Rank	24	TN Rank	16
TN Value	13.2	13.2 TN Value	14.2	14.2 TN Value	13.1	TN Value	12.8	12.8 TN Value	13.7	13.7 TN Value	14.8	14.8 TN Value	14.4

FCC ARMIS Data On Telephone Service Quality: TRA Docket 00-00873 : Telephone Service Standards

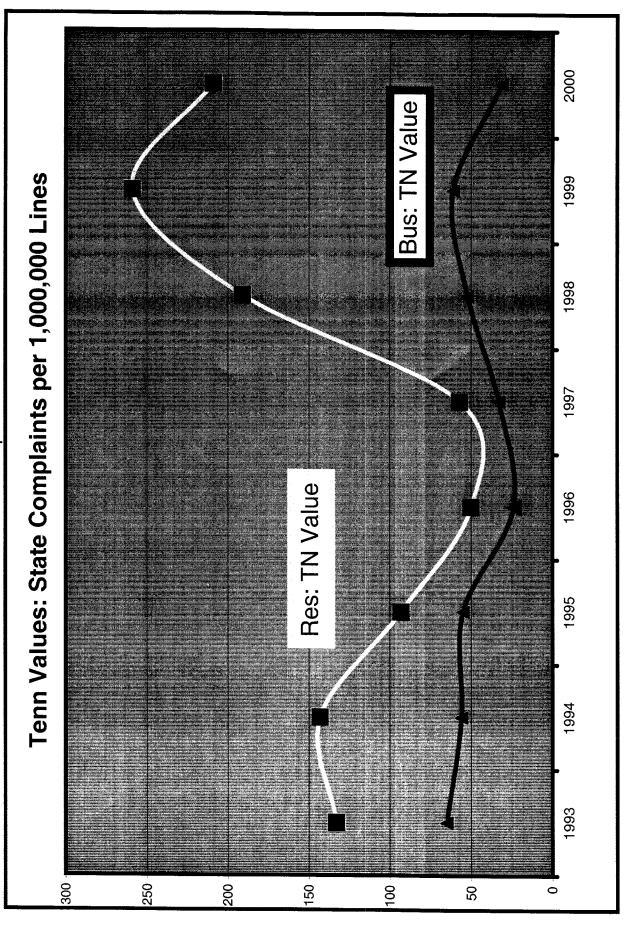
TN Telephone Service Quality
CAPD Display of FCC Armis Data
Chart 1 of 12



TRA Docket 00-00873: Telephone Service Standards FCC ARMIS Data On Telephone Service Quality:

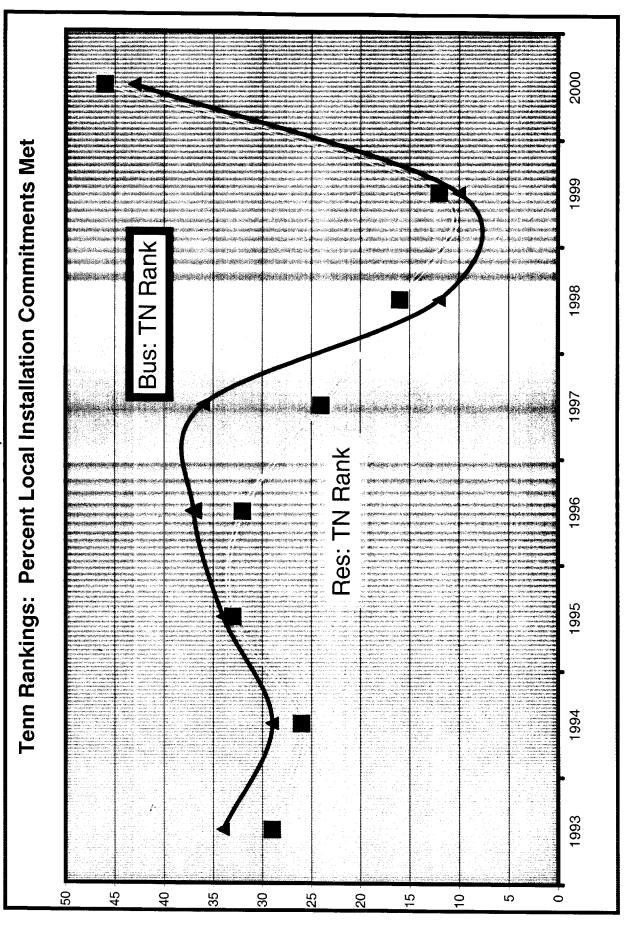
TN Telephone Service Quality_____CAPD Display of FCC Armis Data

Chart 2 of 12

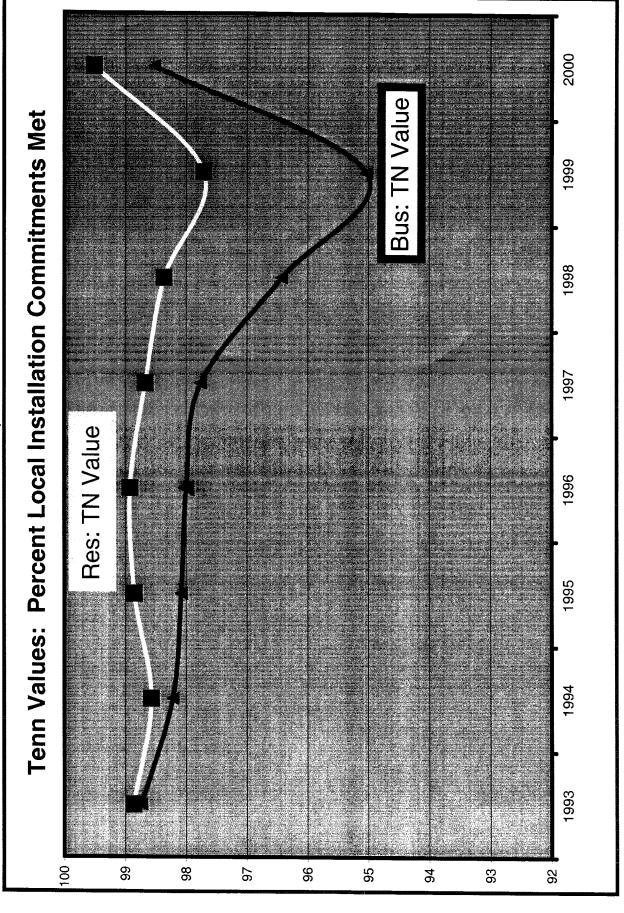


TRA Docket 00-00873: Telephone Service Standards

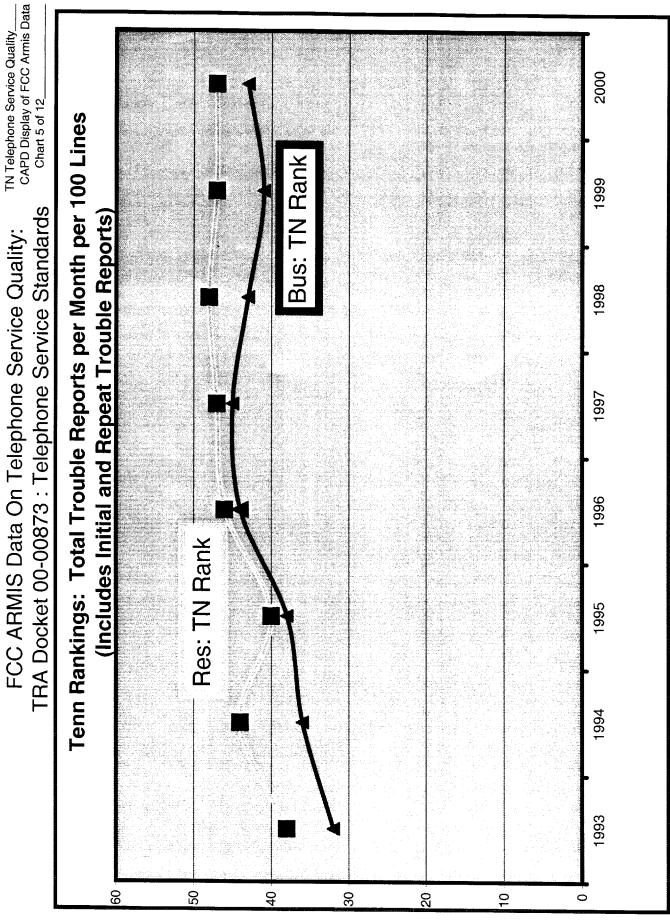




TN Telephone Service Quality
CAPD Display of FCC Armis Data
Chart 4 of 12 TRA Docket 00-00873: Telephone Service Standards FCC ARMIS Data On Telephone Service Quality:



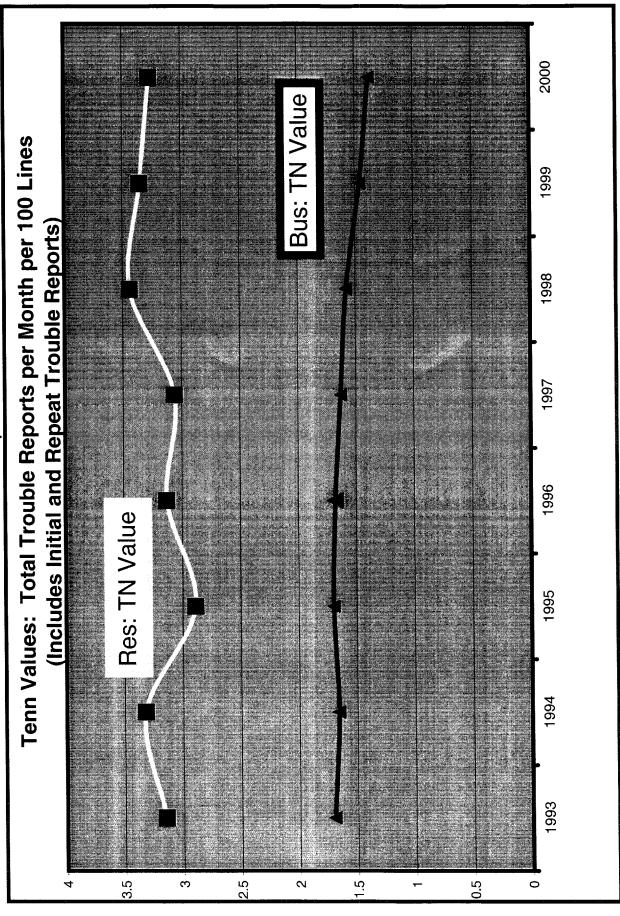
TRA Docket 00-00873: Telephone Service Standards FCC ARMIS Data On Telephone Service Quality:



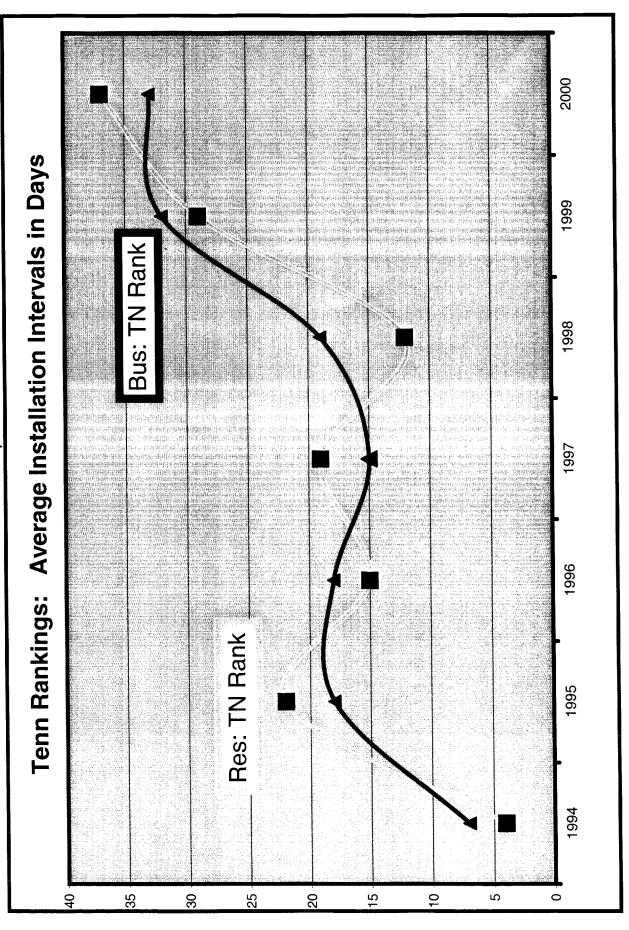
FCC ARMIS Data On Telephone Service Quality: TRA Docket 00-00873 : Telephone Service Standards

TN Telephone Service Quality_____CAPD Display of FCC Armis Data

Chart 6 of 12_



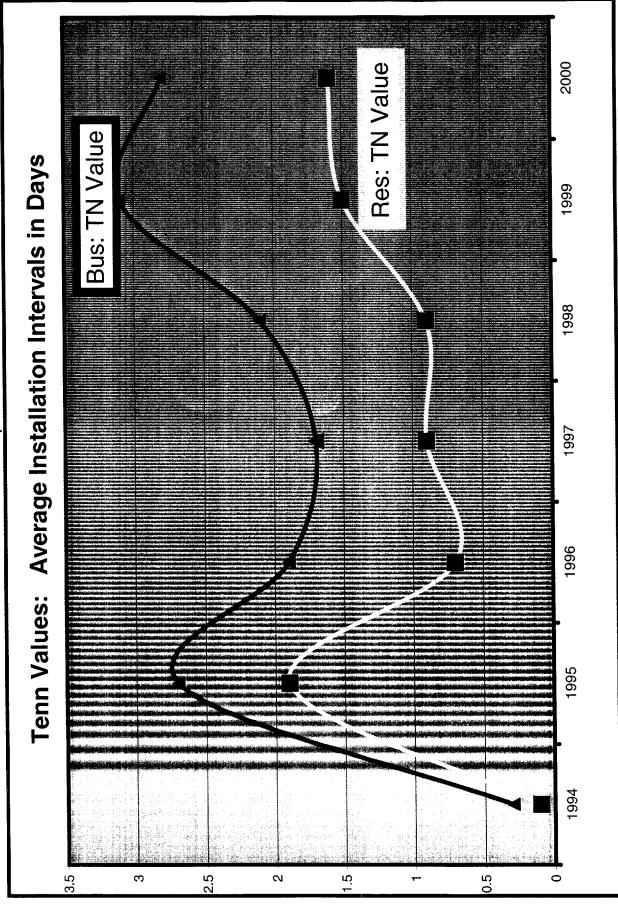
FCC ARMIS Data On Telephone Service Quality: TRA Docket 00-00873 : Telephone Service Standards



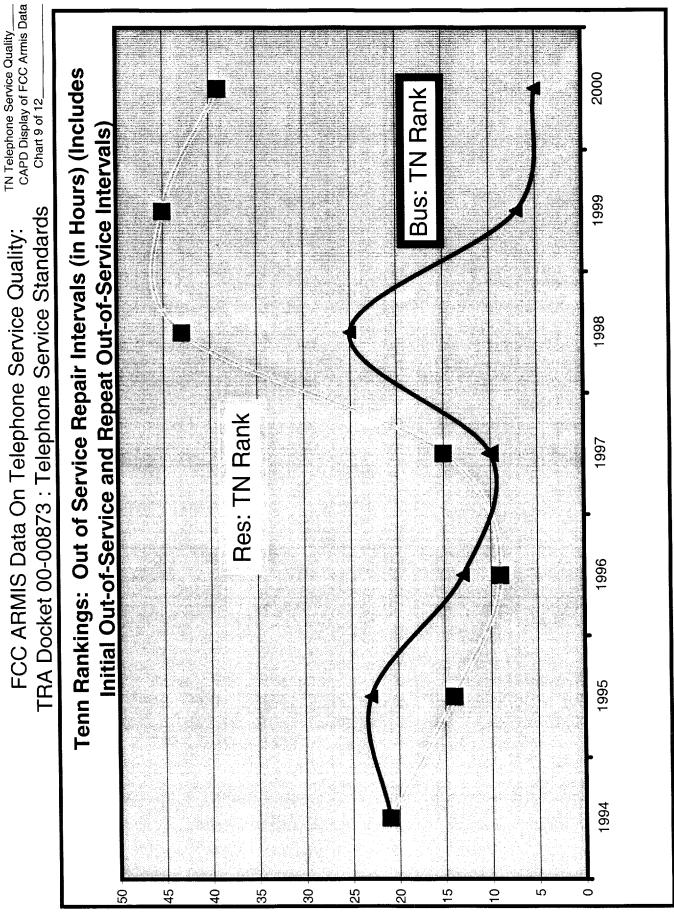
FCC ARMIS Data On Telephone Service Quality: TRA Docket 00-00873 : Telephone Service Standards

TN Telephone Service Quality_____CAPD Display of FCC Armis Data

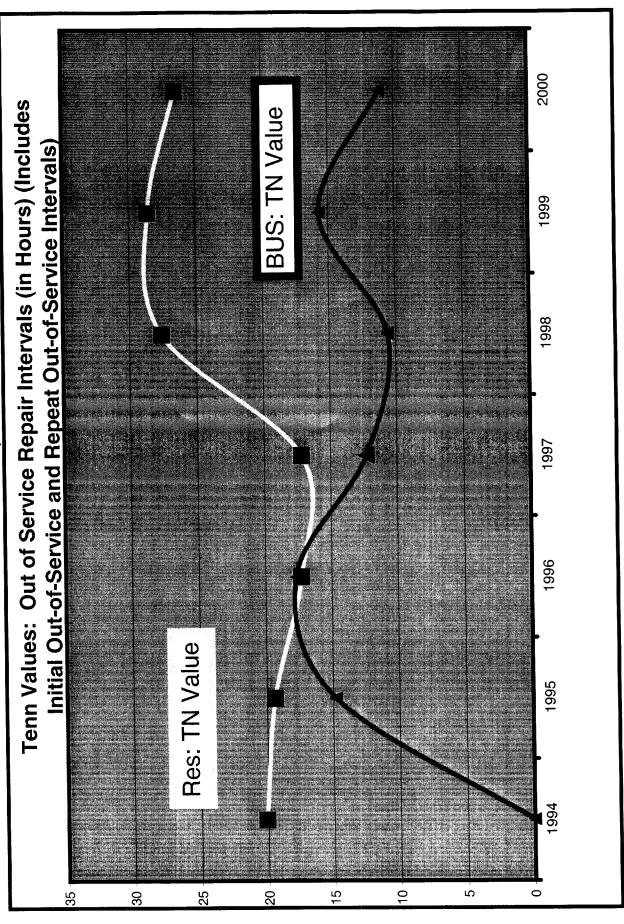
Chart 8 of 12_



TRA Docket 00-00873: Telephone Service Standards FCC ARMIS Data On Telephone Service Quality:



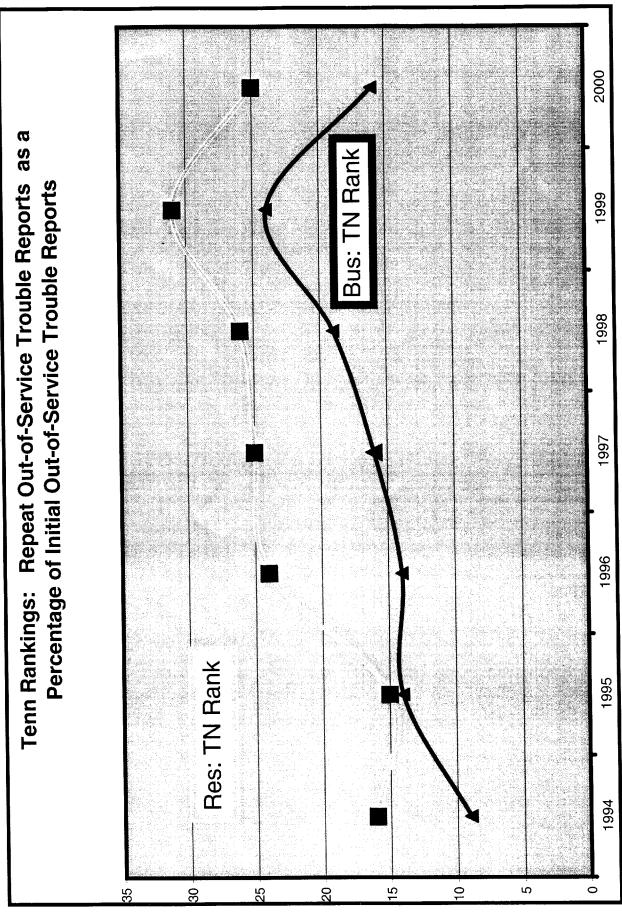
FCC ARMIS Data On Telephone Service Quality: TRA Docket 00-00873 : Telephone Service Standards



FCC ARMIS Data On Telephone Service Quality: TRA Docket 00-00873 : Telephone Service Standards

TN Telephone Service Quality_____CAPD Display of FCC Armis Data

Chart 11 of 12_



TN Telephone Service Quality_____CAPD Display of FCC Armis Data TRA Docket 00-00873: Telephone Service Standards FCC ARMIS Data On Telephone Service Quality:

Chart 12 of 12_

